ABSTRACT

Stereo sound signals are reproduced directly from loudspeakers (SP(L), SP(R)). By using a sum signal and a difference signal of the stereo sound signals as a reference signal, and according to a cross spectrum calculation of the reference signal with a microphone-collected sound signal, calculation is performed to obtain transfer functions of four sound transfer systems between the loudspeakers (SP(L), SP(R)) and microphones (MC(L), MC(R)). The transfer functions obtained are subjected to inverse Fourier transform to obtain impulse responses, which are set in filter means (40-1 to 40-4) to create echo cancel signals and perform echo canceling. This solves the problem of an indefinite coefficient in the echo cancel technique of a multi-channel sound signal.